BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work: Construction of RCC Drains, Roads and other Development works in Thindlu Colony Old Village and surrounding area in Ward No. 09 (Vidyaranyapura).

Estimated Cost : Rs. 52.00 Lakhs

Head of Account : P-1878 Works (Bhagyajyothi, Sooru / Neeru Yojane and General)

Name of Agency: Executive Engineer, KRIDL, Bangalore.

Work order No: BBMP/EE/BTP/WO/189/2019-20 Dated: 13.01.2020.

Measurements Recarded on :

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Ave Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			Mtrs	Mtrs	Mtrs	Mtrs	Mtrs			
1	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications.								Cum	
	Qty as per Premeasurement vide E-MB Page No. 01 is =							**137.40**	952.94	**130934.00**
2	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.								Cum	
	Qty as per Premeasurement vide E-MB Page No. 02 is =							**467.41**	243.88	**113992.00**
3	Providing and laying in position **plain cement concrete of mix 1:2:4** with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.									
	Qty as per Premeasurement vide E-MB Page No. 03 is =							**155.63**	5504.58	**856678.00**
4	Providing and laying **cement concrete** using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete **(RMC) M 20** for R.C.C works laid in 15 cms thick layers and well compacted vibrating, curing, **for raft foundation column footing , main and secondary beams** with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.)								Cum	
	Bottom Concrete									
	Thindlu Raja Beedi S/S	1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	25.70			0.90	0.15	3.47		
	Aswatha Katte Opp Road	1	21.20			0.90	0.15	2.86		
	Siddalingeshwara Layout Main Road N/S	1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	7.60			0.90	0.15	1.03		
	Thind - GKVK Double Road E/S	1	30.00			0.90	0.15	4.05		
		1	30.00			0.90	0.15	4.05		
		1	9.30			0.90	0.15	1.26		
	Culverts									
	opp Aswatha Kette	1	4.70			1.50	0.15	1.06		
	Sir MV Layout 13th Cross	1	5.50			1.50	0.15	1.24		

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer Vidyaranyapura Sub Division BBMP, Bangalore-97

SL. No	DESCRIPTIONS	NO	Length Mtrs	Width 1 Mtrs	width 2 Mtrs	Ave Width Mtrs	Depth Mtrs	Quntity	Unit / Rate in Rs.	Amount Rs.
	Side Wall									
	Thindlu Raja Beedi S/S	2	30.00			0.15	0.60	5.40		
		2	30.00			0.15	0.60	5.40		
		2	30.00			0.15	0.60	5.40		
		2	30.00			0.15	0.60	5.40		
		2	25.70			0.15	0.60	4.63		
	Aswatha Katte Opp Road	2	21.20			0.15	0.60	3.82		
	Siddalingeshwara Layout Main Road N/S	2	30.00			0.15	0.60	5.40		
		2	30.00			0.15	0.60	5.40		
		2	30.00			0.15	0.75	6.75		
		2	30.00			0.15	0.75	6.75		
		2	7.60			0.15	0.75	1.71		
	Thind - GKVK Double Road E/S	2	30.00			0.15	0.75	6.75		
		2	30.00			0.15	0.75	6.75		
		2	9.30			0.15	0.75	2.09		
	Culverts									
	opp Aswatha Kette	2	4.70			0.30	0.90	5.08		
	Sir MV Layout 13th Cross	2	5.50			0.30	0.90	5.94		
		Total Qty =						**134.07**		
		Qty Limited to =						**133.32**	7197.40	**959557.00**
5	Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. **TMT bars Fe 500**								Tonne	
	Qty as per Premeasurement vide E-MB Page No. 04 is =							**8.67**	72326.98	**627075.00**
6	Providing **precast slab of 100mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - (Data rate Approved).								Sqm	
	For Covering Slab									
	Thindlu Raja Beedi S/S	1	30.00				0.75	22.50		
		1	30.00				0.75	22.50		
		1	30.00				0.75	22.50		
		1	30.00				0.75	22.50		
		1	25.70				0.90	23.13		
	Aswatha Katte Opp Road	1	21.20				0.90	19.08		
	Siddalingeshwara Layout Main Road N/S	1	30.00				0.90	27.00		
		1	30.00				0.90	27.00		
		1	30.00				0.90	27.00		
		1	30.00				0.90	27.00		
		1	7.60				0.90	6.84		
	Thind - GKVK Double Road E/S	1	30.00				0.90	27.00		
		1	30.00				0.90	27.00		
		1	9.30				0.90	8.37		
		Total Qty =						**309.42**		
		Qty Limited to =						**307.35**	2337.00	**718277.00**
7	Providing **precast slab of 250mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - (Data rate Approved).								Sqm	
	Culverts									
	opp Aswatha Kette	8	1.50			0.60		12.60		
	Sir MV Layout 13th Cross	9	1.50			0.60		8.10		
		Total Qty =						**20.70**		
		Qty Limited to =						**19.08**	5418.00	**103375.00**

Assistant Engineer

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	DESCRIPTIONS	NO	Length	Width 1	width 2	Ave Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			Mtrs	Mtrs	Mtrs	Mtrs	Mtrs			
8	Providing and laying in position **plain cement concrete of mix 1:2:4** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation, plinth and cills**, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.								Cum	
	Covering Slab Ramp									
	Thindlu Raja Beedi S/S	1	30.00			0.30	0.10	0.90		
		1	30.00			0.30	0.10	0.90		
		1	30.00			0.30	0.10	0.90		
		1	30.00			0.30	0.15	1.35		
		1	25.70			0.30	0.15	1.16		
	Aswatha Katte Opp Road	1	21.20			0.30	0.15	0.95		
	Siddalingeshwara Layout Main Road N/S	1	30.00			0.30	0.15	1.35		
		1	30.00			0.30	0.15	1.35		
		1	30.00			0.30	0.15	1.35		
		1	30.00			0.30	0.15	1.35		
		1	7.60			0.30	0.15	0.34		
	Culvert Ramp									
		2x1	4.70			1.00	0.15	1.41		
		2x1	5.50			1.00	0.15	1.65		
					Total Qty =			**14.96**		
					Qty Limited to =			**14.91**	5275.62	**78659.00**
9	Construction of un-reinforced plain cement concrete pavement, using grade concrete M20 over a prepared base with OPC course aggregate at 0.69 cum fine aggregates at 0.46 cum course and fine aggregtes confirming to IS : 383-2016, with superplastisiser @3lts confirming to IS9103-1999 mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. **(with OPC 320Kg per cum GGBS 40 Kg/cum confirming to IS: 12089 course aggregate @ 0.69cum and fine aggregate @ 0.46cum)**								Cum	
	CC Road									
	Thindlu Colony Shanimahathma Temple C	1	11.00	3.20	1.50	2.35	0.15	3.88		
	Cross Road 2	1	16.00	4.20	1.80	3.00	0.15	7.20		
	Cross Road	1	16.30	4.30	2.50	3.40	0.15	8.31		
		1	17.50	2.20	2.80	2.50	0.15	6.56		
	Aswathkatte Surroundings	1	30.00	4.00	2.80	3.40	0.15	15.30		
		1	13.30	2.80	2.50	2.65	0.15	5.29		
	Aswathkatte opp Road	1	17.50	3.50	3.00	3.25	0.15	8.53		
		1	25.20	3.50	1.40	2.45	0.15	9.26		
	Raja Beedi cross Road	1	11.00	5.00	5.00	5.00	0.15	8.25		
		1	26.60	3.60	1.50	2.55	0.15	10.17		
		1	30.00	3.50	3.40	3.45	0.15	15.53		
		1	9.50	3.40	3.50	3.45	0.15	4.92		
					Total Qty =			**103.20**		
					Qty Limited to =			**103.05**	5354.06	**551736.00**
10	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete								Nos	
	Thindlu Main Road	1	30.00					67		

Assistant Engineer

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SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Ave Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			Mtrs	Mtrs	Mtrs	Mtrs	Mtrs			
			0.45							
		1	30.00					67		
			0.45							
		1	30.00					67		
			0.45							
		1	15.00					33		
			0.45							
					Total Qty =			**233**		
					Qty Limited to =			**231**	432.48	**99903.00**
11	Providing and applying ready mix priming coat **over concrete** / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.								Sqm	
	Kerb Stone Painting									
	Thindlu Main Road	1	30.00				0.45	13.50		
		1	30.00				0.45	13.50		
		1	30.00				0.45	13.50		
		1	15.00				0.45	6.75		
					Total Qty =			**47.25**		
					Qty Limited to =			**46.80**	39.22	**1835.00**
12	Providing and applying spray painting in two coats (excluding priming coat) over concrete / masonry / asbestos cement sheet / plastered surfaces with flat wall paint of approved brand to give even shade after cleaning the surface of all dirt, dust and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.								Sqm	
					Qty Vide Item No. 12			46.80		
								46.80	90.10	**4217.00**
	Sub Total									**4246238.00**
	GST @ 12%									**509549.00**
	KRIDL Charges @ 4%									**169850.00**
									Total	**4925637.00**
Rupees Forty Nine Lakh(s) Twenty Five Thousand Six Hundred Thirty Seven Only										

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

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BBMP, Bangalore-97